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Neurodiversity in the chemical sciences– web page images explained textually

The following images are from our Neurodiversity in the chemical sciences web page.

Common strengths of neurodivergent individuals in the context of chemistry
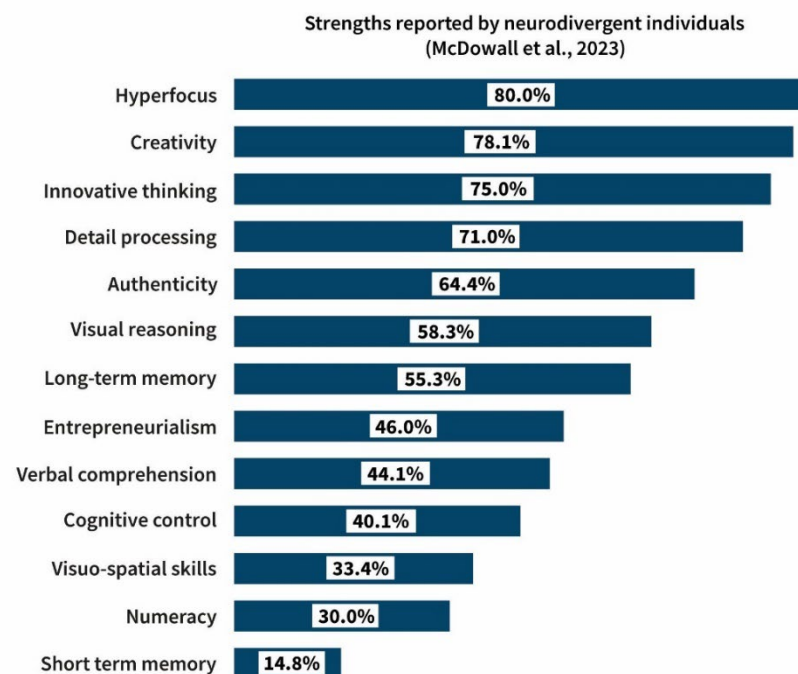
Common challenges for neurodivergent individuals in the context of chemistry

Wellbeing and accessing support - the challenge of asking for help

The sensory environment

The seven principles of universal design for inclusive environments

Common strengths of neurodivergent individuals in the context of chemistry

**Strengths reported by neurodivergent individuals
(McDowall et al., 2023)**

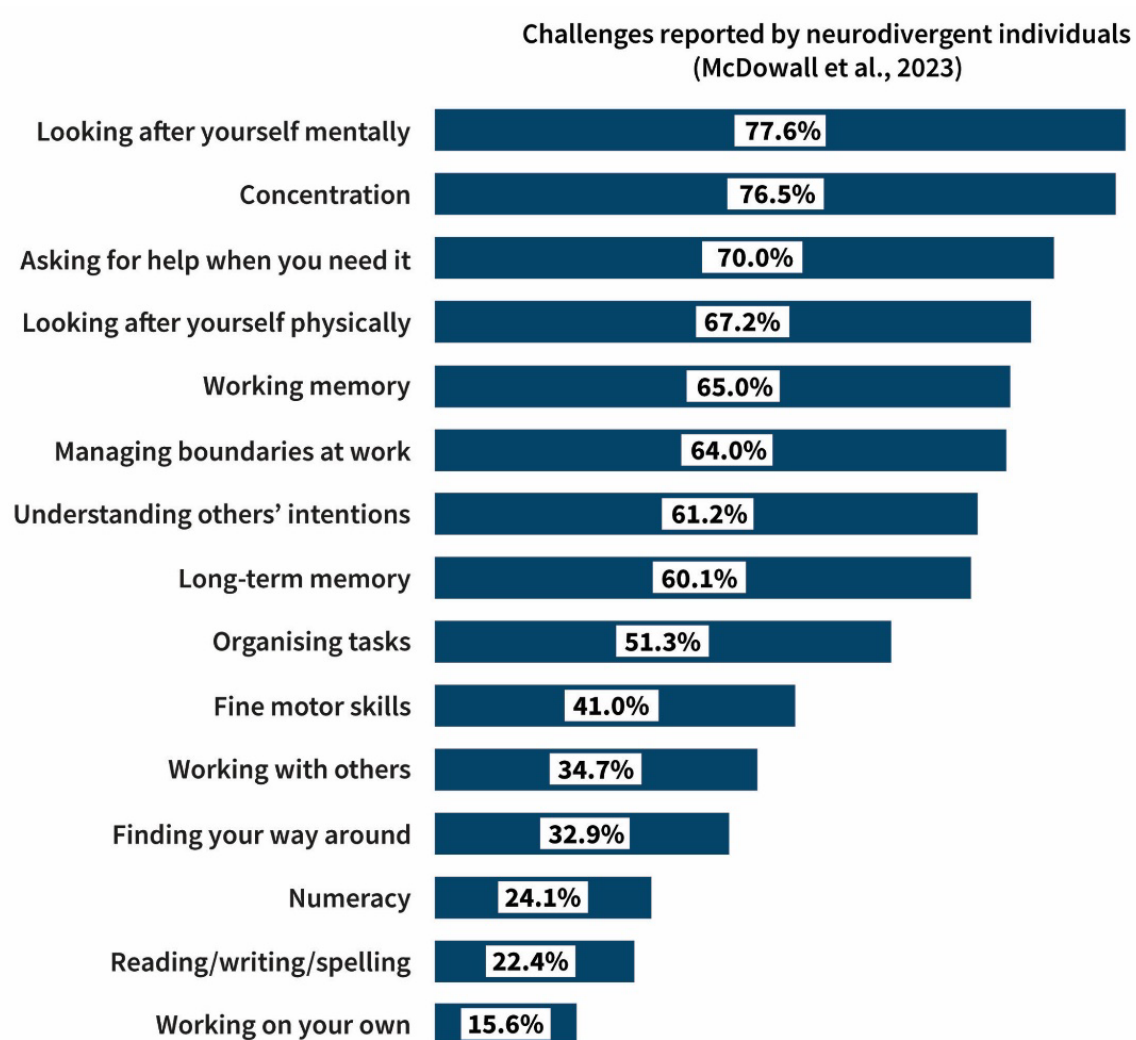| Strength	Percentage
Hyperfocus	80.0%
Creativity	78.1%
Innovative thinking	75.0%
Detail processing	71.0%
Authenticity	64.4%
Visual reasoning	58.3%
Long-term memory	55.3%
Entrepreneurialism	46.0%
Verbal comprehension	44.1%
Cognitive control	40.1%
Visuo-spatial skills	33.4%
Numeracy	30.0%
Short term memory	14.8%

A bar chart showing the percentage of neurodivergent participants reporting specific strengths from McDowall et al's (2023) research:

- 80% of participants reported 'hyperfocus' as a strength.
- 78.1% of participants reported 'creativity' as a strength.
- 75% of participants reported 'innovative thinking' as a strength.
- 71% of participants reported 'detail processing' as a strength.
- 64.4% of participants reported 'authenticity' as a strength.

- 58.3% of participants reported 'visual reasoning' as a strength.
- 55.3% of participants reported 'long-term memory' as a strength.
- 46% of participants reported 'entrepreneurialism' as a strength.
- 44.1% of participants reported 'verbal comprehension' as a strength.
- 40.1% of participants reported 'cognitive control' as a strength.
- 33.4% of participants reported 'visuo-spatial skills' as a strength.
- 30.1% of participants reported 'numeracy' as a strength.
- 14.8% of participants reported 'short-term memory' as a strength.

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Common challenges for neurodivergent individuals in the context of chemistry

**Challenges reported by neurodivergent individuals
(McDowall et al., 2023)**

Challenge	Percentage
Looking after yourself mentally	77.6%
Concentration	76.5%
Asking for help when you need it	70.0%
Looking after yourself physically	67.2%
Working memory	65.0%
Managing boundaries at work	64.0%
Understanding others' intentions	61.2%
Long-term memory	60.1%
Organising tasks	51.3%
Fine motor skills	41.0%
Working with others	34.7%
Finding your way around	32.9%
Numeracy	24.1%
Reading/writing/spelling	22.4%
Working on your own	15.6%

A bar chart showing the percentage of neurodivergent participants reporting specific challenges from McDowall et al's (2023) research:

- 77.6% of participants reported 'looking after yourself mentally' as a challenge.
- 76.5% of participants reported 'concentration' as a challenge.
- 69.5% of participants reported 'asking for help when you need it' as a challenge.
- 67.2% of participants reported 'looking after yourself physically' as a challenge.
- 64.4% of participants reported 'managing boundaries at work' as a challenge.
- 64.8% of participants reported 'working memory' as a challenge.
- 61.2% of participants reported 'understanding others' intentions' as a challenge.
- 60.1% of participants reported 'long-term memory' as a challenge.
- 51.3% of participants reported 'organising tasks' as a challenge.
- 40.5% of participants reported 'fine motor control' as a challenge.
- 34.7%% of participants reported 'working with others' as a challenge.
- 32.9% of participants reported 'finding your way around' as a challenge.
- 24.1% of participants reported 'numeracy' as a challenge.
- 22.4% of participants reported 'reading/writing/spelling' as a challenge.
- 15.6% of participants reported 'working on your own' as a challenge.

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![Royal Society of Chemistry logo]

Wellbeing and accessing support - the challenge of asking for help

An image of an employee with a speech bubble saying "I'm neurodivergent, I have ADHD and dyslexia. Please could I access to support at work?". The same individual has a thought bubble thinking "I wonder how they will respond...". The thought bubble splits off into two visualisations of two different possible responders from a manager. One manager has a speech bubble saying "I understand, I've taken training and educated myself about neurodiversity. Let's organise a meeting to discuss what adjustments might be useful". The other manager has a speech bubble saying "You don't need special treatment, that's just an excuse for being lazy".

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The sensory environment

A mind map showing five sensory differences often experienced by neurodivergent individuals:

Visual – an image of a cluttered office with patterned walls.

Touch – an image of an individual experiencing sensory overload from the feeling of itchy labels in their lab coat, the goggles, and gloves.

Temperature – an image of individual sat at a desk with a fan blowing air on them.

Sound – an image of a noisy lab environment, with fans whirring and people talking.

Smell – an individual holding their nose while carrying a strong smelling chemical in a test tube.

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The seven principles of universal design for inclusive environments

A mind map showing 7 universal design principles:

- Equitable
- Flexibility in use
- Simple and intuitive to use
- Perceptible information
- Tolerance of error
- Low physical effort
- Size and space for approach and use

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